

Laparoscopic Management Of Remnant Intrahepatic Duct Stone In Caudate Lobe After Open Liver Resection

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Background : Laparoscopic liver resection (LR) and bile duct exploration (BDE) for intrahepatic duct (IHD) stones is limited by technical difficulties caused by adhesion to adjacent tissue or distorted anatomy resulting from recurrent inflammation. We aimed to present laparoscopic redo LR and BDE with T-tube insertion for recurrent IHD stones.

Methods : A 69-year-old man was admitted with multiple IHD stones with cholangitis. He performed open left hepatectomy and cholecystectomy about 20 years ago. Magnetic resonance imaging and biliary dynamic computed tomography showed multiple IHD stones in caudate lobe and right posterior duct, and distal common bile duct (CBD) stricture. Laparoscopic surgery was performed in the supine position and four trocars were inserted. There was severe intra-abdominal adhesion around liver due to previous operation. After adhesiolysis around liver, we detected middle hepatic vein using intraoperative ultrasonography and resected remnant left liver. After isolation of Spiegel's lobe, we removed the IHD stones using choledochoscope through a dilated IHD at surface of Spiegel's lobe. After we resected Spiegel's lobe, longitudinal choledochotomy was performed in the supraduodenal portion of the CBD and T-tube was inserted.

Results : The operative time was 460 minutes and estimated blood loss was 100ml. There was no intraoperative complication. About twenty IHD stones were removed and the size of stone was five to fifteen millimeters. The patient was discharged on the day 7 of postoperative hospital stay with clamped T-tube without any complication.

Conclusions : The laparoscopic surgery can be safe and feasible option for managing IHD stones even after open LR.

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